

REMARKS

The Office Action dated August 30, 2006, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-5 are pending and respectfully submitted for consideration.

Interview

The Applicants wish to thank the Examiner for the interview granted on November 28, 2006. In the interview, claims 1 and 5 and Japanese Patent Publication No. JP 10-228914 (JP '914) reference was discussed. As a result of the interview, the Examiner indicated that further consideration would be given to the arguments presented in the present Response.

Allowable Subject Matter

The Applicants wish to thank the Examiner for indicating allowable subject matter in claims 2-4. Claims 2-4 were not rewritten in independent form as they depend from claim 1 which is allowable for the reasons submitted below.

Rejection Under 35 U.S.C. § 102

Claims 1 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP '914. The Applicants traverse the rejection and respectfully submit that JP '914 fails to disclose or suggest the claimed features of the invention.

As a result of the claimed invention, even if defects, for example, pinholes, are generated, the substrate component is not eluted, because the coating is directly formed on the surface of the material plate without surface treatment. Therefore, it is difficult for the gold coating to separate, and the contact resistance between the

separator and membrane electrode assembly (MEA) can be suppressed to be low. The Applicants respectfully submit that JP '914 does not disclose or suggest the claimed features of the invention, and thereby fails to provide the critical and non-obvious advantages of the present invention.

Claims 1 and 5 recite that gold is coated on the surface at 2.3 to 94% of area rate with respect to an area where the gold is coated without surface treatment by a nickel coating. The Office Action took the position that JP '914 in Figure 1 shows a metallic (i.e. stainless steel) separator (1) wherein a gold plate layer (9) is formed on a bulging tip side edge (8), and that only a small area of the electrode has been gold plated (an area less [than] the total area of the separator. The Office Action also took the position that the bulging tip side edge 8 that has been plated anticipates coating on the surface at 2.3 to 9.3% [sic] of the area rate. See page 4, lines 1-6 of the Office Action. The Applicants respectfully submit, however, that there is no disclosure or suggestion that gold is coated on the surface of the stainless steel plate in JP '914 at the claimed area rate with respect to an area where the gold is coated.

Area rate is the area rate of gold with respect to the region where the gold is coated: $(\text{area of the region where the gold is coated} - \text{area of the total pin holes}) / (\text{area of the region where the gold is coated})$. The area rate of gold is calculated with respect to the region where gold is coated. See also paragraph [0022] of the specification as originally filed.

Under U.S. patent practice, silence in a reference is not a proper substitute for adequate disclosure of facts from which a conclusion of obviousness may justifiably follow. See In re Burt, 148 USPQ 548 (CCPA 1996). Also, under U.S. patent practice,

a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628,631, 2 USPQ 2d. 1051 (Fed. Cir. 1987). In this case, JP '914 is silent regarding the claimed area rate of gold coated on the surface as there is no disclosure or suggestion in the figures (e.g., Fig. 1 mentioned in the Office Action) or the text of JP '914 of gold coated on the surface at between 2.3 and 94% of the area rate with respect to an area where the gold is coated. As such, clear structural differences exist between the metallic separator of the present invention and the separator of JP '914.

In addition, under U.S. patent practice, the fact that a certain characteristic may occur or be present in the reference is not sufficient to establish the inherency of that characteristic. In re Rijckaert, 28 USPQ 2d. 1955 (Fed. Cir. 1993). Further, the Examiner must provide a basis to reasonably support the determination that the allegedly inherent characteristic ***necessarily*** flows from the teachings of the applied prior art. Ex Parte Levy, 17 USPQ 2d. 1461 (Board of Patent Appeals and Interferences 1990). See MPEP §2112 (IV). In this case, the Applicants respectfully submit that gold coated on the surface of the stainless steel plate at 2.3 to 94% of the area rate is neither expressly nor inherently described in JP '914.

Furthermore, JP '914 suggests the opposite of that recited in claims 1 and 5. Claims 1 and 5 recite the gold being coated on the surface at 2.3 to 94% of area rate with respect to an area where the gold is coated. In contrast, JP '914 discloses that there is no pin hole in the area where the gold is coated and that no pin hole was found in the gold plate layer 9. See paragraphs [0006] and [0013] of JP '914. This clearly

indicates that the area rate where the gold is coated is 100% in JP '914, because the existence of a pin hole would indicate that the coating is less than 100%.

In addition, with respect to claim 5, the Applicants respectfully submit that JP '914 fails to disclose or suggest additional features of the invention. Claim 5 recites a stainless steel plate having a surface and a step of coating gold on the surface in an acid bath without performing surface treatment.

The Office Action took the position that paragraph [0008] in JP '914 discloses using cyanogens golden potassium solution (i.e. a potassium gold cyanide solution) as the acid bath for plating the metallic separator. See page 4, lines 12-14 of the Office Action. In contrast, JP '914 merely discloses using a cyanogens golden potassium solution as a plating processing liquid, but not that the plate is coated in an acid bath. Specifically, JP '914 discloses that in a parcel-gilding stroke, parcel plating is carried out to the bulge tip side edge [side] 8 of the bulge shaping section 7 of a separator material using the sparger method which blows off plating processing liquid from the nozzle which impressed the electrical potential difference to the separator material in the plated section, and forms a partial deposit, using a cyanogens golden potassium solution as plating processing liquid. See paragraph [0008] of JP '914. The sparger method is a method of scattering or sprinkling. The topical application of a cyanogens golden potassium solution as a plating processing liquid is not comparable to coating a plate in an acid bath. Therefore, there is no disclosure or suggestion of the step of coating gold on the surface of a stainless steel plate in an acid bath in JP '914.

Therefore, the Applicants respectfully submit that JP '914 does not disclose or *suggest* at least the combination of features of the gold being coated on the surface at

2.3 to 94% of area rate with respect to an area where the gold is coated as recited in claims 1 and 5, or stainless steel plate having a surface and a step of coating gold on the surface in an acid bath without performing surface treatment, as further recited in claim 5. Accordingly, JP '914 does not anticipate claims 1 and 5, nor are claims 1 and 5 obvious in view of JP '914. As such, the Applicants respectfully submit that claims 1 and 5 are allowable over JP '914.

Conclusion


The Applicants respectfully submit that claims 1 and 5 are allowable. Claims 2-4 depend from claim 1. The Applicants respectfully submit that these dependent claims are allowable at least because of their dependency from allowable base claim 1. Accordingly, the Applicants respectfully request withdrawal of the rejections, allowance of claims 1-5 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper,

may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 108421-00094.**

Respectfully submitted,

A handwritten signature in cursive script, reading "Rhonda L. Barton".

Rhonda L. Barton
Attorney for Applicants
Registration No. 47,271

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810

RLB/elz/wbp

TECH/458367.1